IN THE CLAIMS

Please amend claim 16.

Claims 1 - 12 (Cancelled)

13. (Previously presented) An antenna for communicating with a mesh network comprising:

a multi-layer circuit board having a first side and a second side, with a ground plane formed within the multi-layer circuit board;

an antenna array, affixed to the first side of the multi-layer circuit board, having M x N array of antenna elements, where M and N are integers greater than 1, said antenna array adapted to selectively synthesize one or more radiation patterns for communicating with neighboring nodes of said mesh network;

a driver circuit, affixed to the second side of the multi-layer circuit board, having a power divider that divides an input microwave signal into M signal paths, a plurality of phase shift circuits are coupled to M-1 paths and the output of each phase shift circuit is coupled to an antenna element, one of the M signal paths is coupled directly to an antenna element.

14. (Original) The antenna of claim 13 wherein M is 5 and N is 8.

15. (Cancelled)

16. (Currently amended) The antenna of claim 13 wherein the phase ~~sift~~ shift circuits comprise switched hybrid couplers that, in response to a control signal, phase shift the signals on the M-1 paths by a discrete phase amount.

17. (Original) The antenna of claim 16 wherein the discrete phase shift is at least one of –90 degrees, 0 degrees and +90 degrees.

18. (Original) The antenna of claim 17 wherein the discrete phase shifts cause a main beam of a radiation pattern formed by the array to be directed 0 degrees, +45 degrees and –45 degrees.

19. (Original) The antenna of claim 13 further comprising a modem circuit and a transceiver circuit.